Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A laser irradiation device comprising:

a) a laser source for emitting a first laser beam;

b) a first optical system for converting said first laser beam into a second laser beam;

c) a diffraction grating light valve having a plurality of reflective elements arranged in a predetermined direction for converting said second laser beam into modulated signal beams, said plurality of reflective elements comprising

a ribbon-shaped fixed reflective element having a fixed reflecting surface, and

a ribbon-shaped movable reflective element having a movable reflecting surface; and

d) a second optical system for directing said signal beams onto a medium,

wherein said second laser beam is linearly polarized in a direction substantially parallel to said predetermined direction.

2. (Original) The laser irradiation device according to claim 1, wherein

said first optical system comprises

a polarization direction converter for converting a polarization of said first laser beam.

3. (Original) The laser irradiation device according to claim 2, wherein

said polarization direction converter is a phase plate.

4. (Original) The laser irradiation device according to claim 3, wherein said first laser beam has a peak wavelength within the range from 800 nm to 820 nm.

5. (Currently amended) A laser irradiation device comprising:

a) a laser source having a plurality of emitters arranged in a first direction for emitting a first laser beam linearly polarized, said first laser beam being polarized in a second direction substantially perpendicular to said first direction;

b) a first optical system for converting said first laser beam into a second laser beam;

c) a diffraction grating light valve having a plurality of reflective elements arranged in a predetermined direction for converting said second laser beam into modulated signal beams, said plurality of reflective elements comprising

a ribbon-shaped reflective element having a fixed reflecting surface, and

a ribbon-shaped movable reflective element having a movable reflecting surface; and

d) a second optical system for directing said signal beams onto a medium,

wherein said first optical system comprises a halfwave plate for rotating a polarization of said first laser beam by 90 degrees.

6. (Original) The laser irradiation device according to claim 5, wherein said first laser beam has a peak wavelength ranging from 800 nm to 820 nm.

7. (Currently amended) A laser irradiation device comprising:

a) a laser source having a single emitter for emitting a first laser beam substantially linearly polarized;

b) a first optical system for converting said first laser beam into a second laser beam, said second laser beam being substantially the same in polarization direction as said first laser beam;

c) a diffraction grating light valve having a plurality of reflective elements arranged in a predetermined direction for converting said second laser beam into modulated signal beams, said plurality of reflective elements comprising

a ribbon-shaped fixed reflective element having a fixed reflecting surface, and

a ribbon-shaped movable reflective element having a movable reflecting surface; and

d) a second optical system for directing said signal beams onto a medium,

wherein said laser source is so arranged that said first laser beam is linearly polarized in a direction substantially parallel to said predetermined direction.

8. (Original) The laser irradiation device according to claim 7, wherein

said first laser beam has a peak wavelength within the range from 800 nm to 820 nm.

9. (Currently amended) An image recorder for modulating a laser beam to record an image on a recording medium, said image recorder comprising:

a) a laser source for emitting a first laser beam having a peak wavelength ranging from 800 nm to 820 nm;

b) a diffraction grating light valve for modulating said first laser beam in response to an image signal to produce a zero-order diffracted signal beam, said diffraction grating light valve comprising

b-1) a plurality of reflective elements arranged in a predetermined direction, said plurality of reflective elements comprising

b-1-1) a ribbon-shaped fixed reflective element having a fixed reflecting surface, and

b-1-2) a ribbon-shaped movable reflective element having a movable reflecting surface,

wherein said first laser beam is linearly polarized in a direction substantially parallel to said predetermined direction; and

c) an imaging optical system for irradiating said recording medium with said zero-order diffracted signal beam.

10. (Cancelled)

11. (Currently amended) The image recorder according to ~~claim 10~~ claim 9, further comprising

a polarization direction converter disposed between said laser source and said diffraction grating light valve for converting a polarization direction of said first laser beam.

12. (Original) The image recorder according to claim 11, wherein

said polarization direction converter is a phase plate.

13. (Previously presented) The image recorder according to claim 9,

wherein said laser source has a plurality of emitters arranged in a first direction, said first laser beam being polarized in a second direction substantially perpendicular to said first direction,

said image recorder further comprising

d) a halfwave plate disposed between said laser source and said diffraction grating light valve for rotating a polarization of said first laser beam by 90 degrees.

14. (Currently amended) The image recorder according to ~~claim 10~~ claim 9, wherein said laser source is so arranged that said first laser beam is linearly polarized in a direction substantially parallel to said predetermined direction.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)